



Case report

A report of five cases of self-mutilation for the purpose of insurance fraud



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ABSTRACT

Self-mutilation means direct and deliberate destruction of one's own body tissue without intending suicide. Some of the forensic referrals are the fraudulent persons who wish to obtain insurance benefits by simulating self-induced harms as injuries due to accidents. In this article we report five cases of self-mutilation for the purpose of obtaining insurance payments. These cases were interesting because of the following reasons: (1) Fracture of the tibia bone for the purpose of obtaining insurance payments is extremely rare. To our knowledge, the specialised literature does not present a similar case study as we described here. (2) In the cases we describe here, nobody had prior history of social and psychiatric problems and violence. In addition, on examination, no sign of previous scars was found in the whole body skin. (3) Self-mutilation injuries are often painless, parallel and delicate lines which are most frequently in the upper limb opposite to the dominant hand and in the areas that can be easily reached. In one of our cases, self-mutilation of the leg shin and the dominant hand were on the same side of the body. (4) In our study, all of the cases had high school education and were from small counties. Four patients were within the age range of 20–30 years, living in a populous family (six-member family) and of middle socioeconomic status. These results are consistent with previously available data for self-mutilation in Iran.

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1. Introduction

Self-mutilation (SM) means direct and deliberate destruction of one's own body tissue without intending suicide.¹ Cutting is the most preferred method of self-injury used by forensic referrals.² Forearms, wrists, arms, front of the torso and legs on the opposite side of the dominant hand as well as forehead are common areas for self-injury.²

SM appears to be an increasing social pathology among forensic referrals in developing countries.³ A recent study found approximately 12.6% of forensic referral patients as SM in Iran.² This proportion is considerably high, because researchers have reported the rate of SM to be about 4% in the general population.^{4–6}

The prevalence of SM is usually higher among females in the general population.^{7–9} However, some studies found a higher prevalence of this behaviour among males in forensic referrals.²

The majority of the self-mutilator individuals have some psychiatric disorders, such as personality disorders, and many have a past history of suicide attempts.¹⁰ One main group of SM patients is fraudulent persons who attempt to obtain some advantages including insurance benefits by simulating self-induced harms as injuries due to accidents.² Although SM individuals do not have psychiatric problems apparently, they have specific personality disorders.

In this article we describe five cases of SM for the purpose of obtaining insurance payments. These cases were referred to the Forensic Medicine Center of Fars province, southwest of Iran, during 1 year in order to obtain medico-legal and psychiatric opinions.

2. Report of cases

2.1. Case 1

A 49-year-old man who was unemployed, single, right-hand dominant, with high school education and low socioeconomic status was referred to the forensic medicine centre examination unit with the complaint of right-leg shin injury and pain.

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2.2. Case 2

A 30-year-old man who was a driver, single, left-hand dominant, with high school education and middle socioeconomic status was referred to the forensic medicine centre with the complaint of right-leg shin injury and pain.

2.3. Case 3

A 27-year-old man who was a driver, single, right-hand dominant, with high school education and middle socioeconomic status was referred to the forensic medicine centre with the complaint of left-leg shin injury and pain.

2.4. Case 4

A 28-year-old man who was a private company employee, married, right-hand dominant, with high school education and middle socioeconomic status was referred to the forensic medicine centre with the complaint of left-leg shin injury and pain. He claimed the mentioned injury was due to a car accident (motorcycle-car crash).

2.5. Case 5

A 48-year-old man who was a shopkeeper, married, right-hand dominant, with high school education and middle socioeconomic status was referred to the forensic medicine centre with the complaint of left-leg shin injury and pain.

All of the five patients claimed persistently that their injuries were due to a car accident (as a driver or a back-seat passenger).

3. Physical examination, paraclinic assessments and complementary investigations

The physical examination of these five patients revealed a sharp site of cutting with bruising on its margins in addition to swelling and redness of the surrounding skin. Other necessary paraclinic assessments including X-ray radiographs from the site of injury revealed incomplete fracture of the anterior cortex of the tibial middiaphysis (Figs. 1–3).

It was announced in the first report of the forensic medicine experts that the injuries were due to cutting with a sharp-edged object during the last few days. However, all the patients were suspected to have committed a special kind of fraud in order to claim financial compensation from their accident insurance company. Therefore, all the patients were referred directly to a team of forensic medicine specialists relevant to the field for evaluating and confirming the diagnosis of SM by complementary investigations including taking traffic police reports, forensic medical history, physical examination and a structured interview with a psychiatrist. Actually, traffic police reports revealed that there was not any recorded car accident in relation to the patients' claim. Further physical examination confirmed superficial, harmless and localised nature of the wounds which were diagnosed at the first examination. In the structured interview with a psychiatrist, the patients reported symptoms of cluster B personality disorder including: past histories of substance abuse, quarrel and unstable friendship. Finally, after taking all complementary investigations into account, it was announced in the final report of forensic medicine experts that the tibia bone fracture is related to a fabricated accidental injury. The five patients confessed later, explaining that they wanted to get insurance payments. They did not undergo any surgical reconstruction for superficial fractures.



Fig. 1. Radiograph of the right-leg shin showing incomplete fracture (white arrow) of the anterior cortex of the tibial middiaphysis.

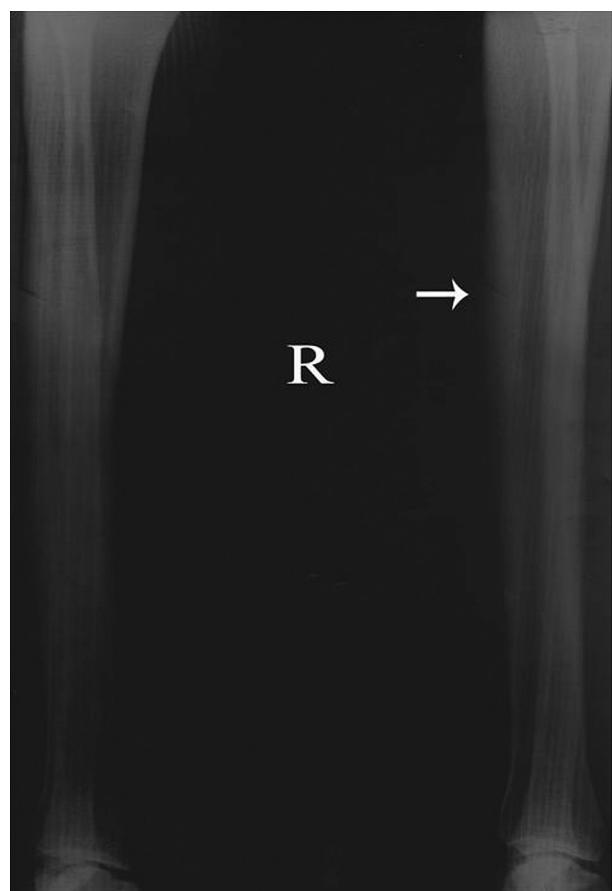


Fig. 2. Radiograph of the right-leg shin showing incomplete fracture (white arrow) of the anterior cortex of the tibial middiaphysis.



Fig. 3. Radiograph of the left-leg shin showing incomplete fracture (white arrow) of the anterior cortex of the tibial middiaphysis.

4. Discussion

Self-inflicted incised injuries are usually different from accident-induced injuries. However, in some forensic cases, the physician might hesitate in considering them as self-induced. The key features that assist in identifying self-inflicted incised injuries are the superficial nature, harmlessness of the cuts in addition to localisation on body sites where the effect can be predicted safely, localisation of the injuries on the side opposite the dominant hand and the used instruments.^{11,12}

The increase in the number of insurance frauds is a worrying issue that bothers both insurance companies and physicians.¹³ In this way, in the review of the current literature we found the study of Ferenc about an unusual case of SM. He reported a fracture of the phalanx that was carried out by a foreign person, in order to obtain illegal accident insurance money.¹⁴ In 2007, Zinka et al. reported that SM typically affects the patient's skin. In their study, self-induced injuries were also used to simulate criminal offences and to obtain insurance payments.¹⁵

When evaluating a questionable patient suspected of attempted insurance fraud, it is very important to take all available data including traffic police reports, psychological interviews especially prior history of social problems, violence and impulsive behaviours and the mental health examination of the patient into consideration. The physician should ask accurate questions about the way fracture has occurred. In addition, it is necessary for the radiologist physician to report the patient's radiograph. Moreover, attention should be paid to the local circumstantial evidences at the scene,

the properties of the instrument used for inflicting the injury and the sign of previous scars in the whole body skin.

These cases were interesting because of the following reasons:

1. Fracture of the tibia bone for the purpose of obtaining insurance payments is extremely rare. To our knowledge, the specialised literature does not present a similar case study as we described here.
2. In the initial examination, the existence of some clues led the forensic medicine experts to suspect that a special kind of fraud had taken place: (A) all the patients were referred to us from close geographical areas, with short time intervals and with similar clinical patterns; (B) on the other hand, the wounds were superficial, harmlessness and localised; and (C) in addition, there were not any additional lesions related to the alleged car accidents. However, we did not find any relations between the five men.
3. In the cases we describe here, nobody had prior history of social and psychiatric problems and violence. In addition, on examination, no sign of previous scars were found in the whole body skin.
4. SM injuries are often painless, parallel and delicate lines most frequently in the upper limb opposite to the dominant hand and in the areas that can be easily reached. In one of our cases, SM of the leg shin and the dominant hand were on the same side of the body.
5. In our study, all of the cases had high school education and were from small counties. Four patients were within the age range of 20–30 years, living in a populous family (six-member family) and of middle socioeconomic status. These results are consistent with previously available data for SM in Iran.²

In terms of employment condition, to be unemployed is a condition more common among self-mutilators.² This is explained partly as unemployed persons might have more reasons to seek a gain through SM. In our study, the majority of the patients (4, 80%) were employed, which is not in harmony with previous studies. This finding highlights the role of unknown contributory factors other than employment status in attempting SM.

Ethical approval

Informed consent was obtained from the patients. The ethical consideration was approved by the Ethics Committee of the Research Deputy of Iran's Legal Medicine Organization.

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Authors contribution

All authors contributed in this paper and final manuscript was approved by all authors.

Conflict of interest

There is no conflict of interest for authors.

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